Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

2nd & Final Bill SBR No. 44/20-21 ATE 2020 07-08-2020

Division: **Electricals (Yelahanka)** Sub-Division: **Electricals**

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated.....

Schedule Docket No. Sub Divisional **Job Code :- 008-17-000057**

Name of Work: **Sub Estime for Providing Pathway lighting at sahakaranagara D Blk Play Gruond in ward no 08.** Head of Account : P – Code: 2178 D.R.No.

Name of Contractor and Full Address : **Technical Manager KRIDL BBMP Bengaluru**

Reference to Agreement No:EE(Ele)YZ/WO/000002/ 2020-21 Date:- 08 / 06 /2020

Certified that the measurements were taken by me on 6/8/20 and recorded of Pages 507 to 510 739 of measurement Book No. 5018 19-20 and that the work is satisfactorily executed.

Assistant Executive Engineer, R.R. Nagar, Sub-Division, KRIDL, BBMP, Bangalore

Contractor

Officer-in-charge of work

Certified that the measurement were taken by me on 6/8/20 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub-Division Officer

II Memorandum of Payment

1) Total value of work done or supplies made as per account within
2) Deduct amount to be held in reserve being .....percent Rs.....
3) " Balance
4) Deduct Payment:
   a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No.....
   adjusted towards cash advance recovery of
   b) Payments Now made } cost store or other material supplied. / recovery of amount creditable to this/other work / Amount paid on this bill Cheque / Cash
5) Balance being unpaid value of work done held in reserve.
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.
7) Net amount due to or from Contractor unadjustments items.
8) Advance to Contractor for materials brought to site (as detailed) within
9) Value of Government materials supplied.

Seal

Total	29,92,900	00
1st & part Amount	22,77,000	00
2nd & Final	7,15,900	00
It	14318	00
CGST	6392	00
SGST	6392	00
FSD	35800	00
CeU	7159	00
EBF	716	00
Fine	723	00
Ded. Cheque	71500	00
Total amount	644400	00

Signature of Contractor

Assistant Executive Engineer, R.R. Nagar, Sub-Division, KRIDL, BBMP, Bangalore

Received Rs..... (Rupees .....)

.....

by cash and by adjustment of Payment as per memorandum

(in final settlement of all demands) P2178 (Entered in the Office)

Witness

1.

2.

Dated Signature of Contractor

Paid by Cash Rs.....Dated.....

Cash Rs.....

Dated.....Initials of Officer making payme

ಟಿಪ್ಪಣಿ: Work partially done by Deputy manager ರವರು ಸಿಮ್ಸ್ ಮೊಬಲಗು ರೂ. 71590.00/- ಗಳನ್ನು ಪಾಸು ಮಾಡಿದ್ದು ಇದರಲ್ಲಿ ರೂ. 71500.00/- ಗಳನ್ನು ಹೊಂದಾಣಿಕೆ ಮಾಡಿಕೊಂಡು ರೂ 644400/- ಗಳನ್ನು

FT/NEFT/RTGS ಮುಖಾಂತರ ನೀಡಲಾಗಿದೆ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು 13/8

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Sl. No	Description	Unit
	Name Of Work:- Sub Estime for Providing Pathway lighting at sahakaranagara D Blk Play Gruond in ward no 08	
1	Fabricating, supplying and erection of ...Mtrs long hot dip **Galvanized Conical pole** with BSEN 100025 grade S355JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178/AWS having dimensions bottom .....mm, top ...mm with 3mm thick, suitable base plate and 4Nos of long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc.,(excluding foundation) as per drawing appended 3 meters - Top 75mm and bottom 105 mm dia	Nos
2	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtrs
3	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required In existing trench/duct 6 sqmm to 16 sqmm	Mtrs
4	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete (As per Civil SR KSRB I-2, P-7)In soil (ordinary)	Mtrs
5	Wiring for lighting/power circuit using one of **FRLS** PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694 confirming to latest amendments 1.5 sqmm	Mtrs
6	10 sqmm	Mtr
7	Providing Rcc Pole pedstal of Size 0.3x0.3x0.8 Mtrs Including digging of pit, tor steel, anchoring bolts nuts ,templates ,Centring,1:4:8base concrete,1:2:4pedestal concrete and etc coplete as per the data sheet enclosed	Nos
8	Supply of LED pole mounting type post top lantern with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/ clear glass material, delivering superior light output Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB . LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Post Top Lantern with 35 watts	Nos
9	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Streetlight 90 Watts	Nos

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Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		14	5037.00	70518.00	14	70518.00	
		253	150.00	37950.00	253	37950.00	
		253	11.88	3005.64	253	3005.64	
		195	76.00	14820.00	195	14820.00	
		100	20.50	2050.00	100	2050.00	
		18	115.00	2070.00	18	2070.00	
		14	1080.00	15120.00	14	15120.00	
		14	6400.00	89600.00	14	89600.00	
		18	7160.00	128880.00	18	128880.00	

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10	Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains. Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ mass-wiring protection. Compatible for pole mouting with outer dia of 42mm to 52mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with. W.System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source LED Floodlight 140W	
11	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit. The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	
12	Fabricating, supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete.16SWG	No
13	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint 40x40x6mm	Sqm
14	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947 100 to 125Amps	Nos
15	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947 (Icu = Ics)FOUR POLE 100Amps 25kA	Nos
16	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40 Amps DP	Nos
17	Supplying and Fixing of. mm dia class A GI pipe bracket up to 2 Mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires Using 32mm dia G.I.Pipe	Nos
18	Supplying and fixing of Twin Dial electro mechanical timer (without contactor) using necessary bolts, nuts and washers etc., Group A, PWD SR 2007-08,	Nos
19	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application. smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.Three Phase	Nos
	Total Rs	
	Add KRIDL Charges 4%	
	Add 12% GST Rs	
	Total Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

Assistant Executive Engr
R.R. Nagar, Sub-Divn
KRIDL, BBMP, Bangalore

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		6	17600.00	105600.00	6	105600.00	
		2	2999.70	5999.40	2	5999.40	
		89540	0.35	31339.00	89540	31339.00	
		16	255.00	4080.00	16	4080.00	
		2	7200.00	14400.00	2	14400.00	
		2	6400.00	12800.00	2	12800.00	
		3	1336.00	4008.00	3	4008.00	
		18	835.00	15030.00	18	15030.00	
		2	4200.00	8400.00	2	8400.00	
		1	51500.00	51500.00	1	51500.00	
				617170.04		**617170.04**	
				24686.80		24686.80	
				74060.40		74060.40	
				715917.25		**715917.25**	

715900

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